Abstract of the disclosure

An optical wavelength selection device containing an optical beam source, a device for collimating the optical beam to produce a collimated optical beam, a diffraction grating assembly for diffracting the collimated optical beam to produce a collimated optical diffracted beam, a device for modifying the polarization state of the collimated optical beam, and a lens assembly for focusing the collimated optical diffracted beam. The device for modifying the polarization state of the collimated optical beam is located within the diffraction grating assembly in one embodiment and before the diffraction grating assembly in another embodiment.